

Flash or Short-Term Electroplating Tank containing Plating and Polishing Metal HAP

Cadmium, Chromium, Lead, Manganese, and Nickel
Generally Available Control Technology (GACT)
73 FR 37741, July 1, 2008; as amended at 76 FR 57919, Sept. 19, 2011
<http://ecfr.gpoaccess.gov/>

Control Practices

Option 1: Limit short-term or “flash” electroplating to no more than one (1) cumulative hour per day or three (3) cumulative minutes per hour of plating time.

Option 2: Use a tank cover for at least 95 percent of the plating time.

Management practices, as practicable

1. Minimize bath agitation when removing parts except as necessary to meet part quality requirements.
2. Maximize drip time when removing parts using drain boards and drip shields or withdrawing parts slowly.
3. Minimize the drag-out of bath solution through the design of barrels, racks, and parts such as slotted barrels, tilted racks, and flow-through holes.
4. Use tank covers if available.
5. Minimize tank heating without adversely affecting production or part quality.
6. Repair and maintain racks, barrels, and other equipment.
7. Minimize bath contamination.
 - a. Preventing or quickly recovering dropped parts
 - b. Utilization of distilled/de-ionized water
 - c. Water filtration
 - d. Pre-cleaning parts to be plated
 - e. Thorough rinsing of pretreated parts to be plated
8. Maintain bath chemistry through process control.
9. Perform good housekeeping including sweeping, vacuuming, and periodic wash-downs as necessary.
10. Minimize spills and tank overflows.
11. Use squeegee rolls in continuous or reel-to-reel plating tanks.
12. Conduct leak detection inspections.
13. Identify opportunities for pollution prevention.

Exclusions from this Regulation

This regulation exempts the following operations:

- Hard and decorative chromium electroplating
- Chromium anodizing
- Plating and polishing conducted for:
 - Research and development

- Education
- Repair of surfaces or equipment
- Restoration of the original finish
- Dry mechanical polishing prior to plating
- Trace quantities of any one of the five (5) metals

Applicable Definitions

Flash electroplating means an electrolytic process performed in a tank that using or emitting any of the plating and polishing metal HAP and using no more than three (3) cumulative minutes per hour or no more than one (1) cumulative hour per day.

Short-term plating means an electroplating process using or emitting any of the plating and polishing metal HAP and used no more than three (3) cumulative minutes per hour or one (1) hour cumulative per day.

Tank cover for batch process units means a solid structure made of an impervious material designed to cover the entire open surface of a tank or process unit that is used for plating or other metal coating processes.

Tank cover for continuous process units means a solid structure or combination of structures, made of an impervious material designed to cover at least 75 percent of the open surface of the tank or process unit that is used for continuous plating or other continuous metal coating processes.